

目 次

今日化学

储氢材料的新载体——金属有机框架材料 赖文忠 戈芳 李星国 (1)

教学研究 with 改革

大力推进通识教育 实施全面化学教育与人才培养——南京大学化学专业本科人才培养

方案和教学计划的修订 侯文华 丁维平 王志林 (7)

化学类系列公选课的设置与改革 孙登明 (10)

地方高等师范院校化学实验课程体系的构建与实践 杨水彬 黄春保 王虹 等 (13)

分析化学教学中知识点的树结构设计 王国朝 (16)

嫡教学中的几点体会 吴振玉 朱维菊 裘灵光 等 (20)

分析化学实验教学改革与实践 姚思童 张进 (23)

设置有机化学实验周的改革与实践 李桂芬 唐荣辉 (27)

绿色化学在我国化学实验教学改革中的应用 张凤秀 叶霞 (29)

知识介绍

再谈什么是活化能——Arrhenius 活化能的定义、解释、以及容易混淆的物理量

..... 罗渝然 俞书勤 张祖德 等 (35)

计算机与化学

Excel 解决化工问题的常用功能简介 曹玲 (43)

化学实验

介绍一个分析化学研究型教学实验——食品中微量铝含量的测定

..... 贾涛 王永鹏 张楠 等 (48)

介绍一个大学开放性实验——超声法制备纳米氧化铜 宿新泰 肖峰 王吉德 等 (52)

介绍一个具有可推广性的分析化学综合实验 陈刚 于洪江 郑丽 等 (56)

安息香缩合反应的影响因素 何强芳 伍光仲 朱洁民 (58)

推荐一个设计性综合化学实验——己二酸的绿色合成 曹小华 徐常龙 张康华 等 (62)

师生笔谈

线性逐步聚合中数均聚合度表达式的系数 邓奎林 钟海滨 张朋飞 等 (67)

理解量子效应的新视角 居学海 (70)

对教材中摩尔气体常数测定实验原理误解的更正 林源为 迟瑛楠 (72)

用数理统计知识探讨分析化学中的数据处理问题 罗群兴 (75)

自学之友

液体的表面张力与内压力 黑恩成 刘国杰 (79)

氨基酸存在形式的分布及滴定法测定的可行性 张云 孟洁 (83)

书评

介绍一本好书——《化学中的多面体》 施开良 (87)

CONTENTS

Chemistry Today

- Novel Carriers for Hydrogen Storage Materials——Metal-Organic Framework Materials
..... *Lai Wenzhong, Ge Fang, Li Xingguo* (1)

Study and Reform of Chemical Education

- To Promote General Education and to Implement Comprehensive Chemical Education and Talent Training
..... *Hou Wenhua, Ding Weiping, Wang Zhilin* (7)
- Study on the Setting and Reform of the Chemical Courses for Public Election *Sun Dengming* (10)
- Design and Practice of Experimental Chemistry Courses System in Regional Normal Universities
..... *Yang Shuibin, Huang Chunbao, Wang Hong, et al* (13)
- Design of the Knowledge Tree for Analytical Chemistry Teaching *Wang Yuanchao* (16)
- How to Teach Entropy *Wu Zhenyu, Zhu Weiju, Qiu Lingguang, et al* (20)
- Reform and Practice of Experimental Analytical Chemistry *Yao Sitong, Zhang Jin* (23)
- Reform and Practice of Experimental Organic Chemistry Week *Li Guifen, Tang Ronghui* (27)
- Green Chemistry in Experimental Chemistry *Zhang Fengxiu, Ye Xia* (29)

Survey of Chemistry

- Activation Energies Revisited *Luo Yuran, Yu Shuqin, Zhang Zude, et al* (35)

Computer and Chemistry

- Introduction of Excel Functions in Solving Chemical Engineering Problems *Cao Ling* (43)

Chemistry Laboratory

- An Analytical Chemistry Experiment——Determination of Microscale Aluminum in Food
..... *Jia Tao, Wang Yongpeng, Zhang Nan, et al* (48)
- An Open Experiment——Synthesis of Nanosized CuO with Ultrasonic Method
..... *Su Xintai, Xiao Feng, Wang Jide, et al* (52)
- A Generalizable Comprehensive Analytical Chemistry Experiment
..... *Chen Gang, Yu Hongjiang, Zheng Li, et al* (56)
- The Influencing Factors on Benzoin Condensation Reaction
..... *He Qiangfang, Wu Guangzhong, Zhu Jiemin* (58)
- Recommendation of a Designed Comprehensive Experiment——The Green Synthesis of Adipic Acid
..... *Cao Xiaohua, Xu Changlong, Zhang Kanghua, et al* (62)

Between Teacher and Student

- Coefficient of Number-averaged Degree of Polymerization in the Linear Stepwise Polymerization
..... *Deng Kuilin, Zhong Haibin, Zhang Pengfei, et al* (67)
- New Insights into Quantum Effects *Ju Xuehai* (70)
- Correction of the Misunderstandings about the Experimental Principle in Measuring Molar Gas Constant in the Textbooks *Lin Yuanwei, Chi Yingnan* (72)
- Data Processing of Analytical Chemistry Based on the Knowledge of Probability and Statistics
..... *Luo Qunxing* (75)

Self Studies

- Surface Tension and Internal Pressure for Liquids *Hei Encheng, Liu Guojie* (79)
- Distributions of Amino Acids and Feasibility of Their Determination by Titrimetry *Zhang Yun, Meng Jie* (83)

Book Review

- An Introduction to *Polyhedra in Chemistry* *Shi Kailiang* (87)